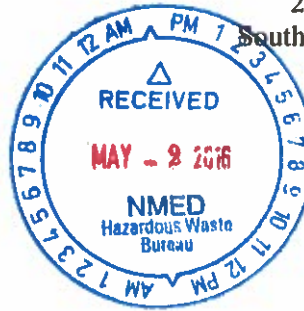




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April 27, 2016

DCN: NMED-2016-08

Mr. David Cobrain  
New Mexico Environment Department (NMED)  
Hazardous Waste Bureau  
2905 Rodeo Park Dr. E/Bldg 1  
Santa Fe, NM 87505

RE: Draft Technical Review of the *Supplemental Investigation Report for S-Site Aggregate Area*, Los Alamos National Laboratory (LANL), dated November 2015.

Dear Mr. Cobrain:

Attached please find draft technical review comments on LANL's, *Supplemental Investigation Report for S-Site Aggregate Area*, LA-UR-15-28016, dated November 2015 (SIR).

We had some general concerns with the report, as noted below. These non-technical concerns hinder the clarity and ease in understanding the report, resulting in a cumbersome presentation of the analysis results (e.g., lines of evidence presented in multiple locations of the report without cross-referencing). In most cases, clarification can be provided by referencing information contained in the SIR. Because such referencing is not used in the report, the results discussions do not generally provide sufficient lines of evidence to support the assertions and conclusions presented in the text. We have included these concerns in the cover letter for your review and consideration.

- Nature and extent is discussed for each solid waste management unit (SWMU) and area of concern (AOC) addressed in Sections 6.0 through 10.0 of the SIR. However, the lines of evidence presented in many of these discussions do not clearly demonstrate that extent has been fully defined. The discussions of nature and extent provided in the SIR rarely include reference to the tables, figures, and/or plates that support the assertions made regarding lateral variation and variation with depth in detected constituents of potential concern (COPC) concentrations and/or detection limits (for non-detect results) that exceed background values (BVs). For example, the discussion of barium in Section 6.2.4.4 does not effectively demonstrate that the lateral extent of barium contamination has been defined at AOC 03-004(c). One must consult Table 6.2-2 and Figure 6.2-2 to verify the assertion made in the text. The discussions of nature and extent in Sections 6.0 through 10.0 should be revised to ensure appropriate references are included to the figures, plates, and tables that support the trends in COPC concentrations noted for each SWMU and AOC. For example, the discussion of arsenic in Section 9.13.4.4 effectively references the appropriate Plate to support the trends in concentration described in the text.

*Draft Deliverable: not a final work product*

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- The purpose of the numerical values cited in the nature and extent discussions is not always clear. For example, examination of the nature and extent discussions in Sections 7.6.5.4, 8.2.4.4, and 9.13.4.4 indicates that many of these discussions compare the magnitude of the maximum detected concentration of a COPC to the magnitude of the applicable soil screening level (SSL). This type of comparison is also presented using maximum detection limits and the applicable SSL for cases where sample results do not exceed the applicable background values (BVs). While it is understood from the discussion in Section 1.2 that COPC screening will be used in the determination of extent, the method of presentation of this information in the nature and extent discussions introduces unnecessary confusion into the text. Rather than highlight the magnitude of the numerical difference between a site concentration, or detection limit, and the applicable screening level, it is recommended that the risk screening calculation be performed and the results of the calculation cited and compared to NMED target levels (excess lifetime cancer risk of  $1E-05$  and hazard quotient or hazard index of 1). Presenting the results of the screening calculations and comparison to NMED target levels would meet the expectations established in Section 1.2 and provide a more direct and quantifiable line of evidence that effectively supports the qualitative discussion currently provided (discussion of relative difference between two numbers). It is recommended that the nature and extent discussions be revised to address this issue.
- A summary of the human health and ecological risk screening assessments for each SWMU and AOC addressed in the SIR is provided in Section 6.0 through Section 9.0. However, the location of information that supports the reported results is never referenced in these summaries. It is recommended that these summaries be revised to include references to the appropriate sections, subsections, and/or tables of Appendix H for additional information regarding how the reported cancer risks, hazard quotients (HQs), and hazard indices (HIs) were determined. For example, Section 8.4.5 should reference Appendix H, Tables H-4.2-115 through H-4.2-116 so stakeholders can access the tabulations of risk and noncancerous hazard for SWMU 16-003(d).
- Appendix H, Section H-4.5.2, page H-46, presents a discussion of the residential HI for SWMU 16-003(e). The discussion indicates that the HI (1.1) is based on the DLs for antimony and cyanide as no concentrations were detected above the BV at this SWMU. For clarity, it is recommended that the discussion be revised to refer the reader to the tables, figures, and/or plates that illustrate the distribution of the DLs for antimony and cyanide that exceed the applicable BV.
- Appendix H, Section H-4.5.2, page H-46, presents a discussion of the residential HI for SWMU 16-003(e). The discussion indicates that the HI (1.7) is based solely on the elevated DLs for thallium. For clarity, it is recommended that the discussion be revised to refer the reader to the tables, figures, and/or plates that illustrate the distribution of the DLs for antimony and cyanide that exceed the applicable BV. For clarity, it is recommended that the discussion be revised to refer the reader to the tables, figures, and/or plates that illustrate the distribution of the elevated DLs for thallium at the site.

- Appendix H, Section H-5.4.5, Population Area Use Factors, pages H-80 through H-89, present the SWMU- and AOC-specific results for adjusted ecological HQs and HIs based on the value of the site-specific population area use factors (PAUFs). The wording used to report the results is awkward and introduces confusion into the presentation. For example, the results for SWMU 11-011(a) are reported as: “The adjusted HIs for SWMU 11-011(a) are less than 1 for all receptors. The plant had an unadjusted HI of 6, and the earthworm had an unadjusted HI of 9.” Because the earthworm and plant are included among all receptors at the site, it is recommended that the result statement be revised to read: “The PAUF adjusted HIs for SWMU 11-011(a) are less than 1 for all affected receptors. The plant had an unadjusted HI of 6 and the earthworm had an unadjusted HI of 9 as these receptor populations are not subject to a PAUF adjustment.”
- Appendix H, Section H-5.4.6, [lowest-observed adverse effect level] LOAEL Analysis, page H-89 states: “HI analyses and adjusted HI analyses were conducted using the LOAEL-based ESLs.” This statement introduces confusion into the discussion as the adjustment referred to in the quoted sentence is not clearly defined. Based on the wording used in Section H-5.4.5, it appears that the adjusted HI analysis refers to a PAUF adjusted HI analysis that is based on the LOAEL. This same issue was identified in Section H-5.4.7, Site Discussions (see discussions of SWMU 11-006(b), SWMU 13-001, SWMUs 16-029(x), and the Courtyard Periphery Area). To clarify the purpose of the “adjusted HI analyses” noted in the quoted sentence and in Section H-5.4.7, it is recommended that references to adjusted HI analyses be revised to read: “PAUF adjusted HI analyses.”
- Appendix H, Section H-5.4.7.2, P-Site Subaggregate, page H-92, discusses the results of the LOAEL-based and PAUF adjusted LOAEL-based ESL evaluations at SWMU 13-001. The first paragraph of the discussion presents the results of the initial NOAEL-based ESL evaluation and the results of the LOAEL-based ESL and PAUF adjusted LOAEL-based ESL evaluations. Tables H-5.4-99 and H-5.4-100 are referenced for the results of the LOAEL-based and PAUF adjusted LOAEL-based evaluations, respectively. The risk drivers are identified for the NOAEL-based and PAUF adjusted LOAEL-based ESL evaluations. For completeness and transparency, this discussion should include a reference to Table H-5.3-25 (results of the NOAEL-based ESL evaluation for SWMU 13-001) and a list of the drivers for LOAEL-based ESL evaluation.

- The uncertainty analyses do not address the impact of COPECs excluded from quantitative evaluation on the calculated LOAEL-based HIs. In addition, these discussions do not address the impact of COPECs that do not have LOAEL-based ESLs on site risks; however, some of these COPECs are addressed in Section H-5.4.8 of Appendix H. Thus, it is not known whether the HIs represent an overestimation or underestimation of actual site risk.
- The site descriptions rely on lines of evidence that are not considered by NMED in determining if calculated risk is overly conservative. These lines of evidence include: consideration of the magnitude of the exceedance above the BV, comparison of the exposure point concentration (or detection limit) to the maximum soil background concentration, consideration of the magnitude of the exceedance above the maximum soil background concentration, frequency of detection arguments well in excess of 5% to discount calculated risk, discounting of calculated risk due to elevated detected concentrations when those discussions do not include the results of statistical analyses showing that the elevated value is not a part of the site data set or identify the need for more data to calculate a EPC based on the 95% upper confidence limit (UCL).

These issues should be addressed and the site descriptions in Section H-5.4.7 of Appendix H revised accordingly. A specific comment illustrating the particular concerns identified in the discussion for SWMU 13-001 is provided below. The specific comment is intended to offer additional insights into the issues associated with many of the site discussions in Section H-5.4.7.

7. Once the general and specific comments related to the assessment of ecological risk are adequately addressed, Sections H-5.5 and H-6.2 of Appendix H, all ecological risk summaries in Sections 6.0 through 9.0, and the discussions in Sections 11.2.2 and 12.0 of the main text should be reviewed and revised as necessary for consistency with the revisions made to the SIR and Appendix H.

### SPECIFIC COMMENTS

1. Section 5.1.1, page 23, lists lines of evidence to be used in determining if an inorganic chemical should be eliminated as a COPC. The first item listed is comparison to the maximum background concentration. This line of evidence is also presented in the second bulleted item in Section 5.2, page 25. NMED does not consider such comparisons as a valid line of evidence for dismissing detected inorganic compounds as COPCs. The range of values in the background data set is considered in the statistical determination of appropriate background threshold values (e.g., BVs). As indicated in Section 2.7.3 of NMED's SSG, if the maximum concentration of a COPC exceeds the applicable BV, statistical tests should be used to determine if the data set for the COPC is statistically different from the applicable background data set. While it is acknowledged that the maximum background value can be used for comparisons in special cases (e.g., statistically determined BV is significantly greater than the maximum background concentration), Section 5.1.1 (and the SIR in its

entirety) should be revised to eliminate comparisons of COPC concentrations to the maximum value in the applicable background data set as a line of evidence for eliminating a detected inorganic compound as a COPC unless conditions exist that preclude the comparison of COPC data to the statistically derived BV.

2. Section 6.6.4.3, page 52, third full paragraph indicates that arsenic is not a COPC because the quantile and slippage tests “indicated site concentrations of arsenic in tuff are not statistically different from background.” However, the same discussion indicates the Gehan test showed that “site concentrations of arsenic in tuff are statistically different from background.” It is not clear why arsenic was not retained as a COPC as it was detected above the applicable background value (BV) and was determined to be statistically different than background by the Gehan test. Revise this discussion to explain why the conservative approach of retaining arsenic as a COPC was not followed in this case.
3. Appendix H, Section H-3.1, page H-13, does not address the potential for construction workers to be exposed to surface and subsurface contamination at the sites addressed in the SIR. Examination of the information provided in the main text and Appendix H indicates that exposure during construction activities at these sites is feasible. Thus, it is unclear why the discussion in Section H-3.1 does not address construction workers as a potential receptor population and determine what if any exposure pathways are complete for these workers. Further, many of the sites include manganese as a COPC. The screening levels for manganese are much more restrictive for the construction worker than the residential receptor; risks via the inhalation pathway drive the construction worker screening levels. As such, for sites where manganese is a COPC, the residential screening levels will not be protective of the construction worker. Revise Section H-3.1 to address the potential for construction workers to be exposed to site contamination at the SWMUs and AOCs addressed in the SIR. For those sites where manganese is not a COPC and other COPCs that drive the construction worker risks are not present as COPCs, a statement that the residential scenario is protective of the construction worker, along with other lines of evidence supporting the exclusion of a construction worker exposure scenario in the human health risk assessment (HHRA) should be provided. If manganese or other COPCs are present resulting in the residential screening not being protective of the construction worker, the construction worker scenario must be evaluated and added to the HHRA.
4. Appendix H, Section H-3.1, page H-13, does not identify the receptor populations to be addressed in the HHRA. Based on discussions in the main text of the SIR, it is known that LANL assessed industrial, recreational, and residential exposure scenarios in the HHRA. However, this information should be provided in the discussion of the Conceptual Site Model (CSM) for the S-Site Aggregate Area. In addition, the sites at which a recreational scenario will be assessed should be identified to avoid confusion in the text as the scenario will not be applied at all SWMUs and AOCs. Revise Section H-3.1 to address these issues related to human receptors.
5. Appendix H, Section H-4.5.2, page H-46, presents a discussion of the residential HI for SWMU 16-017(v)-99. The discussion indicates that the HI (1.7) is based on the hazard quotient (HQ) for lead, which in turn, is based on the maximum lead concentration at the site.

As indicated in the discussion, lead is evaluated separately from other noncarcinogenic COPECs; thus, it is unclear why it has been incorporated into the residential HI calculation for the site. Lead should be removed from the HI calculation and evaluated according to the recommendations presented in Section 2.3.3, Alternative Evaluation for Lead, of the NMED SSG. Revise the evaluation of lead at SWMU 16-017(v)-99 as recommended in Section 2.3.3 of the SSG.

6. Appendix H, Section H-5.3.3.5, page H-73, does not address the impact of manganese at SWMU 16-026(c). According to Table H-2.3-82, manganese is a COPEC for SWMU 16-026(c) with an EPC of 443 mg/kg and was detected in all fifteen samples. However, manganese is not included in Table H-5.3-56, Minimum ESL Comparison for SWMU 16-026(c), or Table H-5.3-57, HI Analysis for SWMU 16-026(c). Table H-5.3-1 lists a no observed adverse effect level (NOAEL)-based ESL of 450 mg/kg for earthworms. While it is noted the minimum ESL comparison (443/450) for manganese results in a HQ of 0.98 and would not change the results of the risk assessment, manganese should be included in the HI evaluation for SWMU 16-026(c) presented in Table H-5.3-57 as it is an identified COPEC. Revise Tables H-5.3-56 and H-5.3-57 to include an evaluation of manganese. In addition, revise Section H-5.3.3.5 of Appendix H to address the impact of manganese on ecological risk at SWMU 16-026(c).
7. Appendix H, Section H-5.3.3.6, page H-74, does not address the impact of vanadium at SWMU 16-026(d). According to Table H-2.3-85, vanadium is a COPEC for SWMU 16-026(d) with an EPC of 15.5 mg/kg and was detected in all eighteen samples. In addition, Table H-5.3-1 lists no observed adverse effect level (NOAEL)-based ESLs of 8.9, 7.6, and 6.7 for the three robin receptor populations addressed in the screening level ecological risk assessment (SLERA). However, vanadium is not included in Table H-5.3-58, Minimum ESL Comparison for SWMU 16-026(d), or Table H-5.3-59, HI Analysis for SWMU 16-026(d). The minimum ESL comparisons for the three robin receptor populations (15.5/8.9, 15.5/7.6, 15.5/6.7) result in HQs of 1.74, 2.04, and 2.31, respectively. Thus, vanadium should be included in the HI evaluation for SWMU 16-026(d) presented in Table H-5.3-59. Revise Tables H-5.3-58 and H-5.3-59 to include an evaluation of vanadium. In addition, revise Section H-5.3.3.6 of Appendix H to address the impact of vanadium on ecological risk at SWMU 16-026(d).
8. Appendix H, Section H-5.3.4.12, page H-78, first paragraph, lists the COPECs with a minimum ESL comparison result of at least 0.3 for the Courtyard Periphery Area. However, pentachlorophenol is not listed. Examination of Table H-5.3-92 indicates that pentachlorophenol is a COPEC for the Courtyard Periphery Area with a minimum ESL comparison result of 0.32. As such, pentachlorophenol is included in the HI evaluation for the Courtyard Periphery Area presented in Table H-5.3-93. Thus, it is not clear why pentachlorophenol is not included in the list of COPECs appearing in the first paragraph of Section H-5.3.4-12. Revise the first paragraph of Section H-5.3.4-12 to include pentachlorophenol in the list of COPECs with a minimum ESL comparison result of at least 0.3.

9. Appendix H, Section H-5.4.7.1, K-Site Subaggregate, page H-90, includes a discussion of the results of the LOAEL-based analyses at SWMU 11-006(b). The second paragraph of the discussion indicates that because the contribution of selenium to site risk was based on the maximum detection limit, risk to plants at SWMU 11-006(b) from selenium is overestimated. Note that the information in Tables H-5.4-91 and H-5.4-92 total to a HI for plants at SWMU 11-006(b) of 1.41 (reported in Tables H-5.4-91 and H-5.4-92 as 1). The tables list an HQ of 0.51 for selenium. If the value for selenium is removed from Tables H-5.4-91 and H-5.4-92, the HI for plants becomes 0.9 and will still be reported in the tables as 1. In addition, this discussion does not address the fact that a LOAEL-based ESL is not available for cyanide in plants. HMX is also a COPEC for SWMU 11-006(b) but is not included in the LOAEL-based analysis for plants. Based on these lines of evidence, it is not clear that the ecological risk to plants at SWMU 11-006(b) is overestimated. Revise the discussion of risk to plants at SWMU 11-006(b) to indicate that while the HI for plants is reported as 1, the risk to plants may exceed 1 because some site COPECs were not included in the quantitative evaluation of the HI for plants.
10. Appendix H, Section H-5.4.7.2, P-Site Subaggregate, page H-92.
- The first sentence of the second paragraph indicates that bis(2-ethylhexyl)phthalate and di-n-butylphthalate were infrequently detected. However, the second sentence indicates that the frequency of detection for bis(2-ethylhexyl)phthalate is 12.5%. Thus, it is not clear why the text indicates that bis(2-ethylhexyl)phthalate was infrequently detected. Based on the information provided, reference to infrequent detection of bis(2-ethylhexyl)phthalate should be eliminated from the discussion. In addition, the second paragraph indicates that a 95% UCL was calculated for both chemicals. However, it is not clear how either 95% UCL was determined and if the determination reflects the recommendations found in Section 2.7.7, Calculation of Exposure Point Concentrations, of the NMED SSG. It appears that a sufficient number of samples and a sufficient number of detected results are available to determine a 95% UCL for use as an EPC for bis(2-ethylhexyl)phthalate; thus, it is not clear why the EPC based on the 95% UCL was not used in the ESL evaluations for SWMU 13-001.
  - Examination of the ESL evaluation for the robin (insectivore) and robin (omnivore) showed that the LOAEL-based ESL evaluation did not include RDX (RDX was a risk driver in the NOAEL-based evaluation). According to Table H-5.4-86, a LOAEL-based ESL is not available for the robin (insectivore) or the robin (omnivore). However, Table H-5.4-99 notes that LOAEL-based ESLs are not applicable (listed as n/a) to the robins. This creates confusion in the discussion of potential risk for the robins as these two tables provide conflicting information (i.e., is a LOAEL-based ESL for RDX not available or not applicable to robin receptors) and the text does not explain why RDX was excluded from the LOAEL-based analysis. In addition, it is known that RDX is toxic to all robin receptors; however, the discussion of the potential risk to robins does not indicate that the risk may be underestimated because RDX was not included in the LOAEL-based ESL evaluations.

- The third paragraph states that selenium was not detected in any samples at SWMU 13-001 and that the EPC is based on the maximum DL. Also, the discussion indicates that the maximum DL is less than the soil BV. Use of the maximum DL in initial risk estimates is a conservative approach; however, concerns arise when the use of the maximum DL results in the chemical becoming a risk driver. While the discussion identifies the concerns associated with the sampling results for selenium, it does not provide or reference the location of the actual sampling results or discuss the variation in the DLs for selenium at SWMU 13-001. While it may be likely that selenium is present at the site, it is not known whether it could be present at a level as high as or approaching the maximum DL (1.4 mg/kg). Additional information, available in the SIR, should be added to the discussion to convey a better understanding of potential selenium levels at SWMU 13-001. In addition, the comparison of the maximum DL for selenium to the maximum soil background concentration should be removed from the discussion as NMED does not consider comparison of discrete results in the site data set to discrete values from the background data set as a defensible line of evidence in determining if risks have been overestimated.
- The closing paragraph notes that field observations indicate no adverse impacts to the plant community at SWMU 13-001 and plants and animals are beginning to recolonize this formerly industrialized site. However, this paragraph does not provide compelling lines of evidence supporting the assertion that the HIs determined for SWMU 13-001 do not indicate potential risk to plants. While some valid lines of evidence are provided in support of the overestimation of plant risk (results of LOAEL-based ESL and PAUF LOAEL-based ESL evaluations, use of maximum DL as EPC for selenium), lines of evidence supporting the underestimation of risk (e.g., site COPECs not included in the determination of LOAEL-based HIs) are not included in the discussion. Thus, the degree to which actual ecological risk to plants is overestimated or underestimated is not known.
- Considerable revision of the site description for SWMU 13-001 is required to provide an accurate representation of the potential risks to ecological receptors at the site. At a minimum, the discussion should be revised to include:
  - A reference to Table H-5.3.-25 that summarizes the NOAEL-based ESL evaluation for SWMU 13-001 to strengthen the clarity and transparency of the discussion;
  - A list of the risk drivers (taken from Table H-5.4-99) for the LOAEL-based ESL evaluation at the site to provide additional information for the basis of the site discussion;
  - A discussion that illustrates how the 95% UCLs for bis(2-ethylhexyl)phthalate and di-n-butylphthalate were determined to demonstrate that the values were calculated in accordance with the NMED SSG;
  - A discussion that explains why an EPC based on the 95% UCL for bis(2-ethylhexyl)phthalate was not used in the NOAEL-based, LOAEL-based, and PAUF adjusted LOAEL-based ESL evaluations presented in Tables H-5.3-25, H-5.4-99, and H-5.4-100;



- A discussion that indicates whether RDX is not applicable or not available for LOAEL-based ESL evaluations of the potential risk to the robin (insectivore) and robin (omnivore).
  - A discussion that indicates potential risk to robin receptors may be underestimated because RDX was not included in the LOAEL-based ESL evaluations of the potential risk;
  - A reference to tables, figures, and/or plates that illustrate the distribution of DLs and the magnitude of the DLs for selenium at SWMU 13-001;
- In addition, the reference to infrequent detection of bis(2ethylhexyl)phthalate should be removed from the discussion. The comparison of the maximum DL to the maximum soil background concentration of selenium should be deleted from the third paragraph. Once these revisions are incorporated into the discussion, the information should be reviewed in its entirety. Based on that review and any additional information in SIR believed to be relevant, the assertions regarding the overestimation (or underestimation) of ecological risk to the robin (insectivore), robin (omnivore), the deer mouse, and plants should be revised to provide the most defensible characterization possible.
11. Appendix H, Section H-5.4.7.3, 300s Line Subaggregate, page H-93, includes a discussion of the results of the LOAEL-based analyses at SWMU 16-001(e). The second paragraph discusses the impact of mercury on the ecological risk results for the site. According to the second paragraph, the risk to the earthworm (HI=4) is overestimated because the risk due to mercury is based on the maximum detected mercury concentration at SWMU 16-001(e). The discussion also states that mercury was detected in all four samples collected in the 0 to 5 feet depth interval. However, it is not clear what level of risk results if the EPC for mercury is reduced. Based on the reported results, it appears that the risk to the earthworm due to mercury at SWMU 16-001(e) should be accepted as reported or subjected to further evaluation. Additional data could be collected so that a defensible EPC based on the 95% UCL could be calculated for mercury. Revise the discussion of mercury at SWMU 16-001(e) to indicate if the LOAEL-based HI for mercury in earthworms will remain at 4 or if mercury at the site will be subjected to further evaluation.
12. Appendix H, Section H-5.4.8, Chemicals without ESLs, pages H-102 and H-103, presents arguments for eliminating 2,4-dimethylphenol, 4-methylphenol, and TATB as COPECs. 2-methylphenol is used as a surrogate for 2,4-dimethylphenol and 4-methylphenol while 1,3,5-trinitrobenzene serves as a surrogate for TATB. The descriptions for all three chemicals indicate that the initial minimum ESL screen resulted in HQs greater than 0.3. Based on the methodology followed in ecological risk analysis, the chemicals should be retained as COPECs. However, LANL also performed a minimum LOAEL-based ESL screening. Based on the results (HIs were less than 0.3), all three chemicals were eliminated as COPECs. This second screen to determine if chemicals are COPECs is unique to Section H-5.4.8. In the balance of the ecological risk analysis, identified COPECs are evaluated for risk to the identified ecological receptors and eliminated from further consideration if the ESL analyses including the COPECs do not exceed an HI of 1. This methodology is established in Section H-5.3 of Appendix H. In addition, Section H-5.4.3 of Appendix H states: "Actual risk for a given COPEC/receptor combination occurs at a higher level [than the NOAEL],

somewhere between the NOAEL-based threshold and the threshold based on the LOAEL.” Thus, elimination of COPECs based on a LOAEL-based analysis is not a conservative approach. Revise these three discussions to indicate that 2,4-dimethylphenol, 4-methylphenol, and TATB are COPECs and revise Section H-5.0 to incorporate these chemicals into the ecological risk assessment for the S-Site Aggregate Area.

#### **MINOR/EDITORIAL**

1. Appendix H, Table H-4.2-133, Residential Carcinogenic Screening Evaluation for SWMU 16-026(d), page H-294, lists an EPC of 14.2 mg/kg for total chromium under the residential scenario. However, Table H-2.3-84, EPCs at SWMU 16-026(d) for the Residential Scenario, lists the EPC for total chromium as 13.5 mg/kg. Review the information on the EPC for total chromium at SWMU 16-026(d) presented in Appendix H and revise these tables for accuracy and consistency.